

Telecommunication Services in Slovakia 2005

1. SUMMARY

The Telecommunication Services market is estimated to be worth about \$1,745 million at an average 9 percent annual growth rate. The fastest developing segments of the market are mobile telecommunication services estimated at \$ 1,023 million and Internet services estimated at \$ 88.6 million. We expect the Telecommunication Services market will grow about 10 - 12 percent annually.

Two GSM cellular operators, [T-Mobile](#) and [Orange](#) reached 4,274,222 active clients at the end of 2004 which is 79.39 percent population penetration. The Slovak hard line telecommunications market is dominated by [Slovak Telecom](#) that provides public telecommunications services in the country. At the end of 2004 were 1,250,415 fixed phones, equating to a penetration over 23 percent. ST had a monopoly on providing public voice service through December 31, 2002. For the last two years ST lost over 150,000 fixed phones subscribers.

The liberalization process creates major business opportunities for telecommunications manufacturers, operators, and service providers. Recent liberalization has already resulted in increased demand for services, with a corresponding growth in the number of clients. The strongest growth has been registered in mobile and Internet services. Even more opportunities for U.S. telecom companies to place their products and services in the Slovak market have manifested after liberalization of voice services since 2003.

Internet services were used by 2,276,055 users, equal to 42.27 percent of the population in the Slovak Republic at the end of 2004. In comparison, with results from 2003, it was 25.58 percent. There is still a dominant position of dial-up Internet connection, but xDSL and EDGE Mobile connections to the Internet have grown rapidly the last two years.

2. MARKET HIGHLIGHTS AND BEST PROSPECTS

2.1.1 Telecommunication Legislation

The Slovak Parliament approved a new [Act on Telecommunication Communications](#) with incorporated EU legislation, effective 1 January 2004. The main purpose of the Act was to incorporate the new EU regulatory framework into Slovak legislation. The Act on Electronic Telecommunications reinforced the position of the Telecommunications Office of the Slovak Republic, which is now entitled to impose new obligations on undertakings with significant market power on the relevant market.

The [Telecommunications Office](#) issued a number of [Measures](#) that opens the market for alternative telecom operators and Internet Service Providers. Since January 2006, customers will be allowed to transfer their personal numbers to another operator and that will make easier for alternative operators to get new subscribers. The Telecom Office is preparing favorable conditions for the third GSM mobile operator and should announce the international public tender for the third GSM Licence soon.

At the end of September 2004 the Telecommunications Office issued negotiation conditions for ST and alternative telecom operators. At the end of 2004 Slovak Telecom intensively negotiated interconnection conditions with seven alternative telecom operators. At the beginning of 2005 ST finished the negotiations with almost all of these companies and signed several contracts. These contracts contain an agreement regarding enabling carrier selections from August 1st 2005.

2.2 Statistical Data

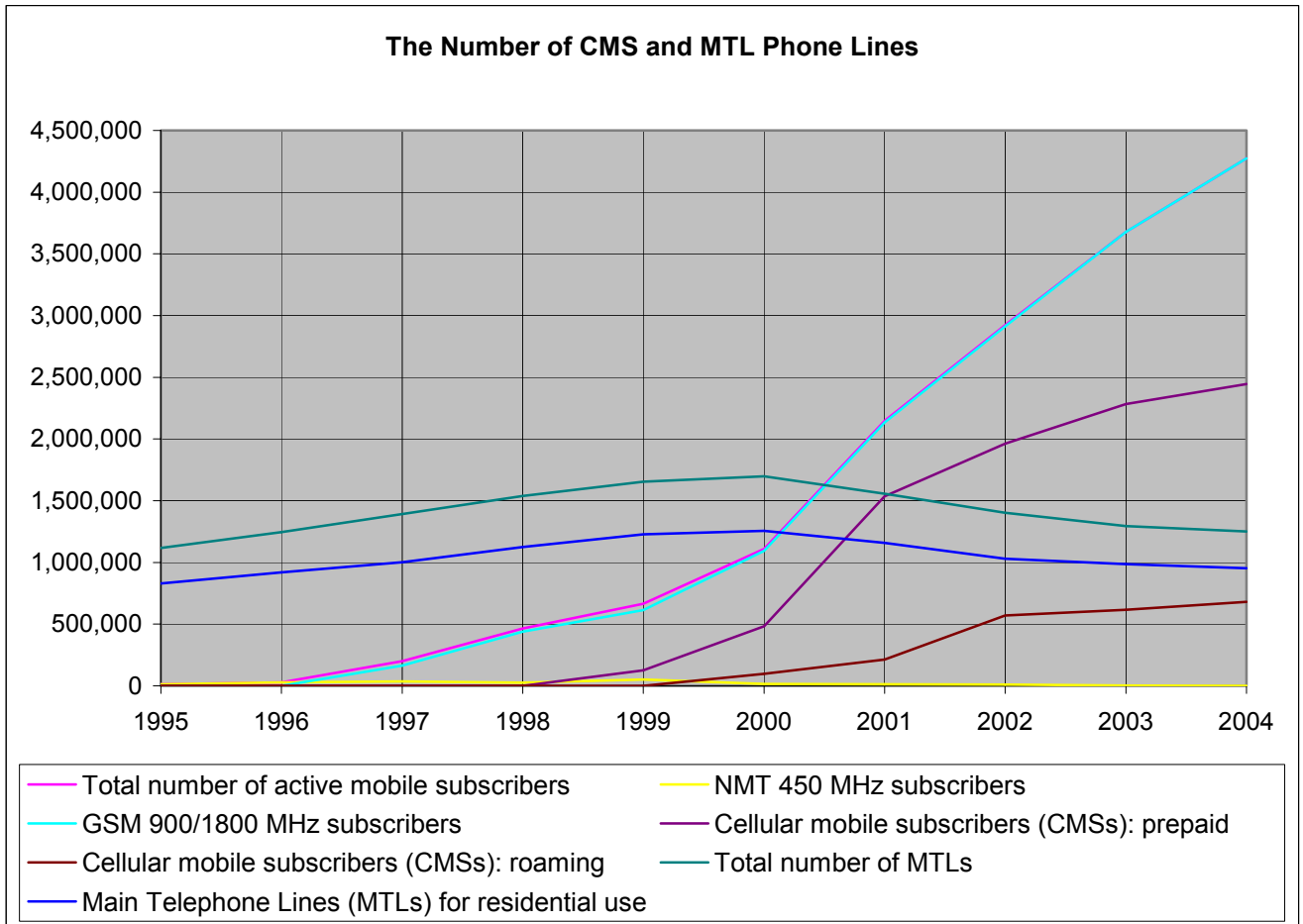
2.2.1 Telecommunication Statistics

The total Telecommunication Services market is estimated to be worth about \$1,745 million at an average 9 percent annual growth rate. The fastest developing segments of the market are mobile telecommunication services that are currently estimated at \$1,023 million and Internet services estimated at \$88.6 million. We expect the Telecommunication Services market will grow about 10 - 12 percent annually. Please see below the table and graph that show Cellular Mobile Subscribers (CMSs) penetration and Main Telephone Lines (MTLs) penetration or click [here](#) to view complete Telecommunication Statistics on line provided by the [Ministry of Post Transport and Telecommunications](#).

The CMSs penetration and MTLs penetration

Indicator	1999	2000	2001	2002	2003	2004
Total number of active mobile subscribers	664,072	1,109,888	2,147,331	2,923,383	3,678,774	4,275,164
NMT 450 MHz subscribers	50,480	16,287	13,870	9,762	1,868	942
GSM 900/1800 MHz subscribers	613,592	1,093,601	2,133,461	2,913,621	3,676,906	4,274,222
CMSs: prepaid	127,007	483,441	1,535,671	1,961,330	2,284,105	2,444,941
CMSs: roaming	ND	96,961	213,119	570,480	617,088	681,834
Total number of MTLs	1,655,380	1,697,982	1,556,254	1,402,725	1,294,673	1,250,415
MTLs for residential use	1,228,760	1,255,250	1,157,258	1,029,687	987,489	953,511
MTLs in Bratislava	300,292	286,258	284,862	266,599	201,850	212,605
MTLs connected to digital exchanges (%)	66.8	70.4	74.3	78.2	84.3	100
Percentage of households with a telephone	63.4	75.4	69.5	61.8	52	50.2
CMSs per 100 inhabitants	12.3	20.5	39.9	54.4	68.4	79.4
MTLs per 100 inhabitants	30.7	31.4	28.9	26.1	24.1	23.2

Source: The Ministry of Post and Telecom, Telecomm Office



Source: The Ministry of Post and Telecom, Telecomm Office

2.2.2 Licensees Issued by the Telecommunication Office

The [Telecommunications Office](#) has issued licenses to two mobile operators, 1 main hard line operator, 11 alternative telecommunication operators, 33 VoIP providers, 78 KATVs, and 117 ISPs. Click [here](#) to view the on-line list of companies – holders of licensees Issued by the [Telecommunications Office](#).

3. COMPETITIVE SITUATION

3.1. Domestic services providers

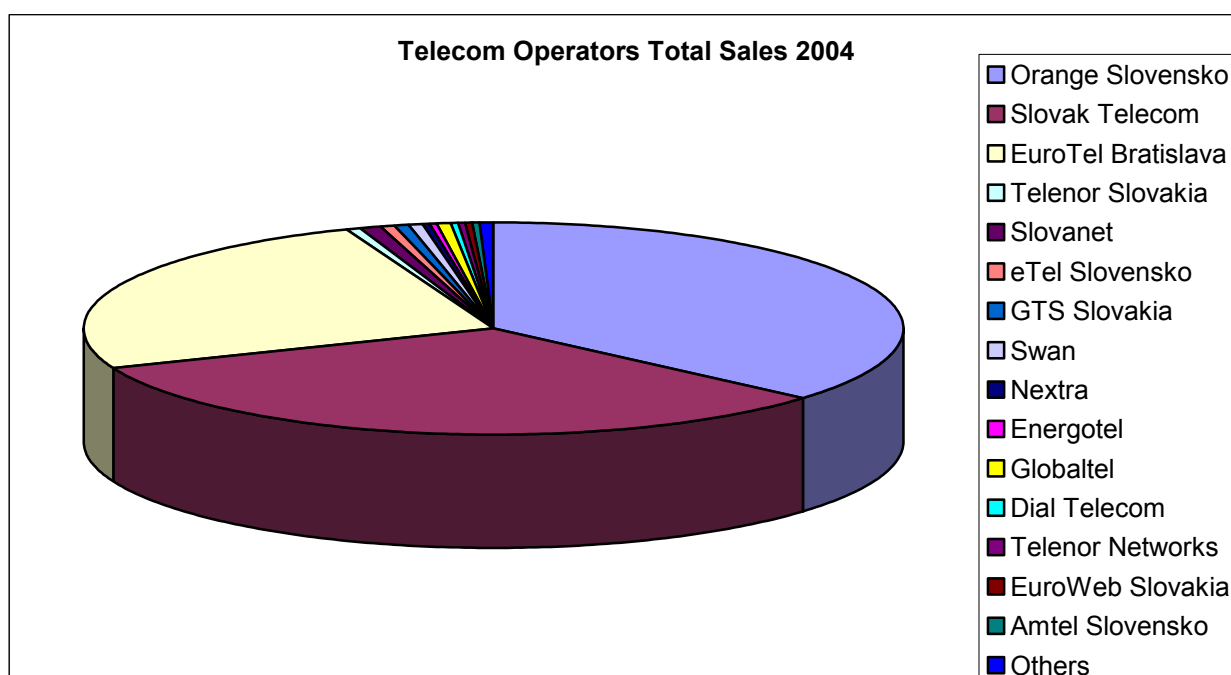
Slovak Telecom is still the dominant hard line telecom operator. We expect that alternative telecom operators will be more popular telecom services providers after clients are allowed to transfer their phone numbers to other providers. Alternative telecom operators have currently the most revenues from corporate clients. The market share of the main Telecom Operators ranked by total sales in 2004 are shown at the next table and graph:

The main Telecom Operators ranked by total sales in 2004

Company Name	Total Sales USD	After Tax Profit USD	Number of Employees
1. Orange Slovensko, a.s., Bratislava	636,828,367	138,038,100	1,321
2. Slovak Telecom, a.s., Bratislava	562,976,367	12,975,700	6,895
3. EuroTel Bratislava, a.s., Bratislava	440,984,600	60,919,100	1,270
4. Telenor Slovakia, s.r.o., Bratislava	13,459,867	447,767	50

5. Slovanet, a.s., Bratislava	12,660,700	137,233	118
6. eTel Slovensko, s.r.o., Bratislava	10,619,033	NA	40
7. GTS Slovakia, s.r.o., Bratislava1	8,556,133	NA	44
8. Swan, a.s., Bratislava	8,095,033	NA	38
9. Nextra, s.r.o., Bratislava	7,266,067	-722,867	70
10.Energotel, a.s., Bratislava	7,138,133	160,033	68
11.Globaltel, a.s., Bratislava	6,891,000	NA	25
12.Dial Telecom, a.s., Bratislava	6,400,000	NA	38
13.Telenor Networks, a.s., Bratislava	4,404,567	-947,200	19
14.EuroWeb Slovakia, a.s., Bratislava	4,100,667	329,133	57
15.Amtel Slovensko, s.r.o. Bratislava	3,093,833	58,867	20
Others		11,525,633	
Total	1,745,000		

Source: The Ministry of Post and Telecom



3.1.1. Hard line Voice Services

[Slovak Telecom](#) is the main supplier of terrestrial voice telecommunications services in the Slovak Republic. ST owns and operates a nationwide telecommunication network and provides local, national and international telephone services, leased line services, data network services, telex and telegraph services, distribution and broadcasting of radio and television signals and other telecommunication services. Since 2000 ST owns [Deutsche Telekom AG](#) a 51percent share; the [Ministry of Post Transport and Telecommunications](#) a 34 percent share; and the [National Property Fund of the Slovak Republic](#) and 15 percent share. In 2004, the total ST's assets were \$ 2,598 million, total revenues \$ 561 million, and net profit \$ 76.9 million. The number of ST subscribers goes slightly down because people prefer cellular phones over hard line phones. Click here to see the [ST's Annual Report](#) and [Complete Financial Statement for 2004](#).

3.1.2. Radio-communication services.

[Slovenske Radiokomunikacie](#) (SR) provides national radio-communication services. Among the largest customers are the public radio service, the public TV service, private holders of radio and TV licenses, banks and others. SR provides local, regional, national and international radio signal broadcasting through

broadcast transmitters in wave bands of SW, MW and FM for statutory operators and license holders. SR also provides local, regional and national television broadcasting through television transmitters and repeaters for the statutory operator and license holders. SR also provides national and international analogue and digital transmission of audio, video and data signals through radio-relay links.

3.1.3. Mobile Services

There are two GSM 1,800 MHz cellular operators, [T-Mobile](#) and [Orange](#). [Orange](#) is the biggest mobile communication provider in Slovakia offering GSM mobile telecommunications service, GPRS and EDGE managed data network services. The company's mobile networks cover approximately 98.7 percent of the Slovak Republic's populated area, and reached 2,385,442 active clients by March 2005. Orange a.s. also owns the UMTS license and is planning to launch the UMTS services by 2006. Orange a.s. is owned 64 percent by [Orange S.A.](#), and the other shares are held by private financial investors and the EBRD.

[T-Mobile](#) is offering GSM and NMT mobile telecommunications services, GPRS and EDGE managed data network services. The company's mobile networks cover approximately 99 percent of the Slovak Republic's populated area, and reached 1,885,000 active clients by the end of March 2005. At the beginning of 2003 2002, T-Mobile launched GPRS. The next innovation was EDGE technology, which has been launched at the beginning of 2005. T-Mobile is owned 100 percent by [Slovak Telecom](#) (a subsidiary of [Deutsche Telekom AG](#)).

The total penetration of Slovak GSM cellular network is currently around 79 percent, and we expect that the penetration will reach 82 percent by the end of 2005. The trend for mobile phone subscribers is shown on the following table:

The number of mobile phone subscribers

Indicator	Orange subscribers	T-Mobile subscribers	Total number of subscribers	Penetration percent
As of Dec. 2004	2,360,573	1,914,591	4,275,164	79.17
As of March 2005	2,385,442	1,885,000	4,270,442	79.8
Deviation	+ 24,869	- 29,591	- 4,722	- 0.9 of percent

Source: Orange, T-Mobile, The Ministry of Post and Telecom

3.1.4. Internet Services

Dial-up Internet connections dominate in Slovakia, but xDSL and EDGE Mobile connections to the Internet have grown rapidly since end of 2003. The biggest Internet Service Providers are [Slovak Telecom](#), [eTel Slovensko](#), [GlobalTel](#), [Dial Telecom](#), [Amtel Slovensko](#), [GTS Slovakia](#), [Nextra](#), [Slovanet](#), [Swan](#) and [EuoWeb](#). Please visit the [Slovak National Peering Center](#) to view ISP providers and [ISPs Data Traffic Load](#).

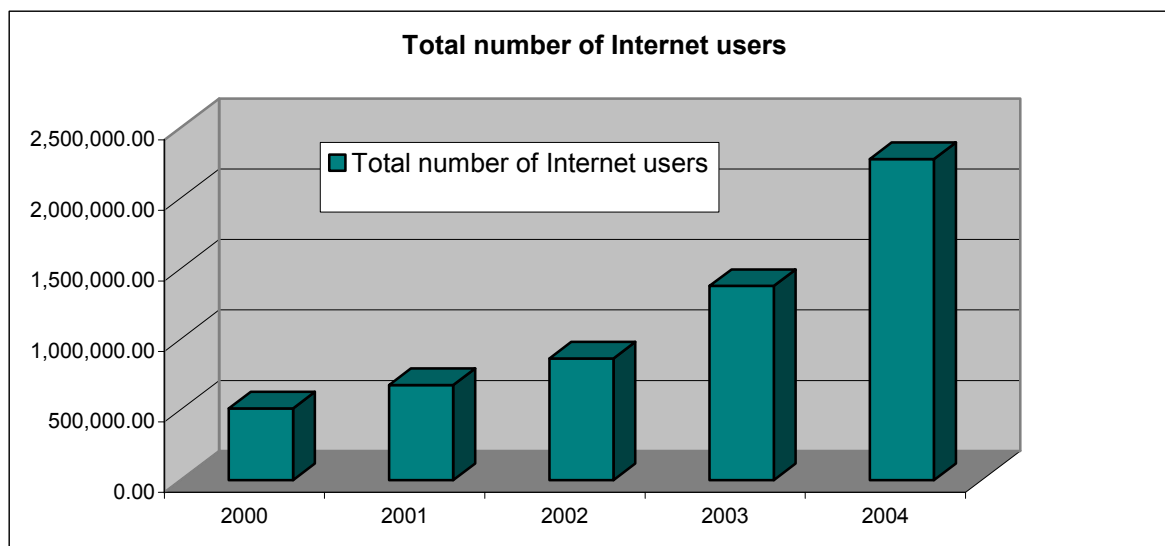
According to recent research, 42.27 percent of the adult population in the Slovak Republic used the Internet by the end of 2004. In comparison, with 2003 results, the penetration was 25.58 percent. Regular users of the Internet are mainly younger, with higher educational levels and higher incomes living in large cities. Please see the following table and chart for more information:

The number of Internet users

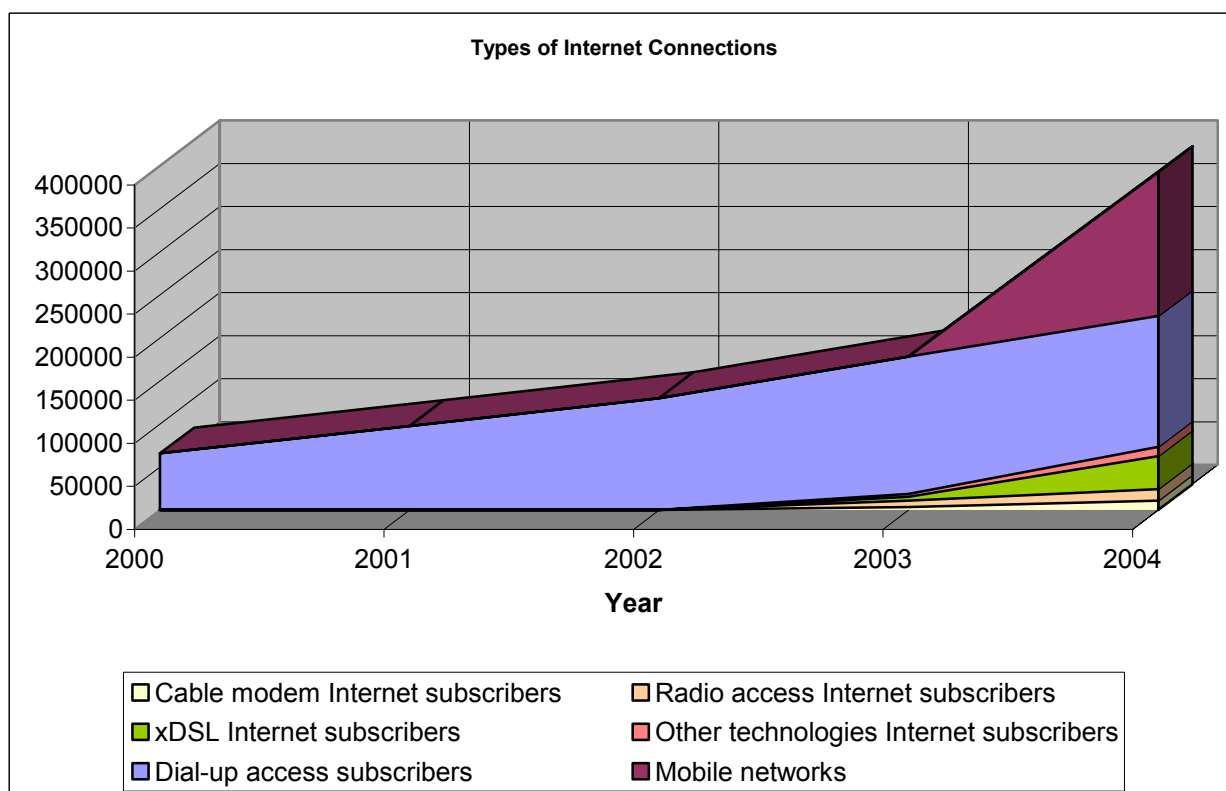
Indicator	2000	2001	2002	2003	2004
Total number of Internet users (estimation)	507,029	674,039	862,833	1,375,809	2,276,055
Number of Internet users per 100 inhabitants	9.38	12.53	16.4	25.58	42.27
Total number of Internet subscribers	67,661	100,099	134,048	182,143	397,777
of which: Residential	26,603	40,781	63,533	96,815	135,860
Business	41,058	59,318	70,515	85,328	94,829
Mobile networks	ND	ND	ND	ND	167,088

Dial-up access subscribers	65,798	97,560	129,965	159,682	151,925
Cable modem Internet subscribers	ND	ND	ND	3,498	10,854
Radio access Internet subscribers	ND	ND	ND	7,487	13,430
xDSL Internet subscribers	ND	ND	ND	4,210	38,334
Other technologies Internet subscribers	ND	ND	ND	3,482	10,762
Number of Internet Hosts computers	56,434	72,557	85,998	111,188	122,377
Number of Hosts per 1000 inhabitants	10.45	13.49	15.99	20.67	22.73

ND ... Not Available Data, Source: The Ministry of Post and Telecom



Source: The Ministry of Post and Telecom



Source: The Ministry of Post and Telecom

Market development for fast access services to the Internet depends partly on price levels for establishing a service, and partly on the need for a fast access option. Even though there has been a steep increase in users of fast access services, dial up connections are still the most widely used access media among the Slovak population. In 2004 the Slovak Government approved legislation for Society Informatization and incentives to increase usage of Internet among the broader population. The Government will partially subsidize purchase of PC for families (approximately \$ 300 per family), schools and institutions as well as monthly fees for high speed Internet connection. The Government builds up eGovernment Public Information Portal www.obcan.sk to hook up the all-Governmental institutions to the Internet. The main aim of the eGovernment is to provide services to the public through a Public Information Portal in order to increase efficiency in public and state administration.

The recent boom of low cost fast broadband Internet access causes demand for multimedia services as for example on-line games, movies, multimedia portals, Internet TV and Radio broadcasting. Several ISPs already provide on-line multimedia or games portals to their clients. For example [Slovak Telecom](#) provides [Games portal](#) and [Slovanet](#) provides [GoFUN](#) portal for its clients.

3.1.5. Telecommunication Equipment

There are three major companies that produce telecommunication equipment. [Alcatel Slovakia](#) produces digital telecommunication switchboards, [Tesla Liptovsky Hradok](#), owned partially by Alcatel, produces private automatic branch exchanges, telephone sets, secretary sets, etc. The third company, [Tesla Stropkov](#), produces switching equipment, telephone test apparatus, telephone sets, telephone set apparatus, installation accessories for telephone sets, and switches.

3.2. Third-Country Imports

The dominant suppliers of services and equipment are Germany, France, Sweden, UK and Finland. The largest international companies (e.g. Alcatel, Siemens, Nokia) have branch offices in Slovakia.

3.3. U.S. Market Position

The U.S. share of the Slovak telecommunication market is low compared to its potential. A number of medium sized foreign companies that provide less competitive services and equipment are successful in the Slovak Telecommunication market because their main competitors are not active in Slovakia. The reason may be the smaller size of the Slovak ICT market, making it less attractive in comparison with other Central European countries.

As the general trend in the ICT sector moves towards faster and cheaper access routes to the Internet, we see an increasing market for related products and services. One of these markets is the access hardware that enables people to get on the Internet: the servers, routers, modems, etc. There is high demand for alternative telecommunication services, VoIP and broadband services. Another interesting market is for related hardware and software solutions utilizing the fast gateways through Virtual Private Networks (VPN's) and electronic commuting.

U.S. providers of on-line services such as video-on-demand, games and music should also make an effort to penetrate the Slovak market and offer fee-based services to those consumers that already have a broadband connection at home. Many young Slovaks speak English and the general population is very interested in American entertainment products. Many of the consumers who have already purchased a broadband connection belong to a segment of the population very receptive to cutting-edge features and seek out the newest on-line services.

U.S. companies have been successful in exporting telecommunications equipment such as ATMs, routers, bridges, PABXs, structured capacity cable systems, encryption technologies for data and voice transmission, ISDN cards, data Multiplexors, mobile phones and equipment for satellite communication.

The following top ten categories of telecommunications equipment produced in the United States, were sold in Slovakia in 2004: switching systems, mobile phones, GSM, EDGE and GPRS technologies, PABX,

modems, servers, SDH and PDH transmission systems, metallic cables, optical cables, structured capacity cable systems and radio relay systems.

U.S. - made link technologies and end-user devices have too low a share in the Slovak telecommunication market compared with its potential. German, Finish, French and Swedish companies are more successful in exporting these products. U.S. made mobile and satellite technologies have a greater share in the Slovak market. The most successful products in the Slovak market so far seem to be U.S. made data technologies.

The Slovak telecommunications market promises the fastest growth for mobile and data transmission technologies and services, which opens even greater opportunities for U.S. exports.

4. END USER ANALYSIS

4.1. Market Access

Slovak companies and government institutions interested in purchasing telecommunication equipment in larger quantities issue public tenders with technical specifications. Each public tender is published in daily newspapers and in a weekly magazine, Obchodny Vestnik, issued by the [Public Procurement Office](#). U.S. companies interested in bidding should submit requested documents as soon as possible. On the due date, a procurement committee opens the offers. Each company that provided offers can observe the bid-opening process. The legislative framework for competition includes the act on [Public Procurement no: 523/2003](#). Other conditions for business are set forth in The Commercial Code. Slovak agencies increasingly post their tenders on websites, although they are not required to do so.

4.2. Import Climate

Foreign goods imported into Slovakia from non-EU countries are subject to customs inspection and imposition of customs duty, taxes, and import charges. Import and excise duties as well as value-added taxes are collected by The Customs Offices www.colnasprava.sk after submission of a customs declaration for release of these goods in to a free circulation regime. The customs authorities both collect customs duties and are administrators of value added tax (VAT) for imports. The flat VAT rate is 19 percent.

The licensing system is Slovakia's primary non-tariff measure. The Ministry of Economy is authorized to issue import and export permits or licenses for sensitive goods with the objective of protecting the domestic market. The licensing procedure is governed by Regulation no. 15/1998 and amended Regulation no. 163/1999, which describes the conditions for issuing official authorization for import/export of goods and services.

4.2.1 Certification

The product certification is identical with the EU certification. Temporarily there are three exceptions for certification of furniture, plastics materials, and textiles. There is no Mutual Recognition Agreement (MRA) between Slovak and U.S. notified bodies. However, the Act No. 246 allows the mutual recognition process of notified bodies if both bodies agree with the recognition.

In general to sell their product on the EU market of 25 member states as well as Norway, Liechtenstein and Iceland, U.S. exporters are required to apply CE marking whenever their product is covered by specific product legislation. CE marking product legislation offers manufacturers a number of choices and requires decisions to determine which safety/health concerns need to be addressed, which conformity assessment module is best suited to the manufacturing process, and whether or not to use EU-wide harmonized standards. There is no easy way for U.S. exporters to understand and go through the process of CE marking, but hopefully this chapter provides some background and clarification.

Products manufactured to standards adopted by CEN, CENELEC and ETSI, and published in the Official Journal as harmonized standards, are presumed to conform to the requirements of EU Directives. The manufacturer then applies the CE Mark and issues a declaration of conformity. With these, the product will

be allowed to circulate freely within the European Union. A manufacturer can choose not to use the harmonized EU standards, but must then demonstrate that the product meets the essential safety and performance requirements. Trade barriers occur when design, rather than performance, standards are developed by the relevant European standardization organization, and when U.S. companies do not have access to the standardization process through a European presence.

Slovak standards legislation is regulated by the Act No. 246 on Technical Requirements for Products and on Conformity Assessment http://www.normoff.gov.sk/unms_uk/index.html, which closely follows the EU legislation. Conformity with Slovak technical standards is voluntary, except when specifically required by this Act or other technical regulations. Conformity to Slovak technical standards is only mandatory if there is direct reference to it in technical regulations. According to the law, importers or producers are responsible to assess the conformity of their product to technical requirements.

Products tested and certified in the U.S. to American standards are likely to have to be retested and re-certified to European Union (EU) requirements as a result of the EU's different approach to the protection of the health and safety of consumers and the environment. Where products are not regulated by specific EU technical legislation, they are always subject to the EU's General Product Safety Directive as well as to possible additional national requirements.

(http://europa.eu.int/comm/consumers/cons_safe/prod_safe/index_en.htm)

European Union standards created in recent years under the New Approach are harmonized across the 25 EU member states and European Economic Area countries in order to allow for the free flow of goods. A feature of the New Approach is CE marking. While harmonization of EU legislation can facilitate access to the EU Single Market, manufacturers should be aware that regulations and technical standards might also become barriers to trade if U.S. standards are different from those of the European Union.

4.2.2. Testing

The National Testing Center for certification of ICT equipment is the [Electrotechnical Research and Design Institute](#) (Elektrotechnický skusobný a projektový ústav a.s.). The testing center certifies cables, rectifiers, transformers, power supply sets, electric appliances for household use, industrial devices with operators, metallic and non-metallic materials used in electronics, semiconductor compounds, conductors, communication devices, printing technology, transport and signalling technology, electric tools of up to 1000 V, hand electric tools, air-conditioning equipment and freezers, heating and cooking devices, electric music apparatus, vending machines, electronic cash registers, etc. In November 1995, the testing center became a full member in the international certification systems, and it is authorized to issue certificates with international force for household appliances, lighting fixtures, information technology and business equipment, insulating transformers, and electronics.

4.2.3. Labeling

Products made in Slovakia or imported must be labeled with CE mark. All energy equipment should have in addition to the CE mark an Energy Efficiency label. Under a 1995 State Language Law, companies are required to mark contents of domestically produced or imported goods, product manuals, product guarantees, and other consumer-related information in the Slovak language.

Manufacturers should be mindful that, in addition to the EU's mandatory and voluntary schemes, national voluntary labeling schemes might still apply. These schemes are appreciated by consumers, and thus, become unavoidable for marketing purposes.

Manufacturers are advised to take note that all labels require metric units although dual labeling is also acceptable until end of December 2009. The use of language on labels has been the subject of a Commission Communication, which encourages multilingual information, while preserving the freedom of Member States to require the use of language of the country of consumption.

The EU has mandated that certain products be sold in standardized quantities. Council Directive 80/232/EC provides permissible ranges of nominal quantities, container capacities and volumes of a variety of products. http://europa.eu.int/eur-lex/en/consleg/main/1980/en_1980L0232_index.html

The Eco-label: The EU adopted legislation in 1992, revised in 2000, to distinguish environmentally friendly production through a voluntary labeling scheme called the Eco-label. The symbol, a green flower, is a voluntary mark. The Eco-label is awarded to producers who can show that their product is less harmful to the environment than similar products. This "green label" also encourages consumers to buy green products. However, the scheme does not establish ecological standards that all manufacturers are required to meet in order to place their product on the market. Products without the EU Eco-label can still enter the EU as long as they meet the existing health, safety, and environmental standards and regulations.

There are concerns in the United States that the EU Eco-labeling program will become a de facto trade barrier and may not enhance environmental protection in a transparent, scientifically sound manner. Also that it may not be open to meaningful participation by U.S. firms and may discriminate unfairly against U.S. business. The EU Eco-label is a costly scheme (up to EUR 1,300 for registration and up to EUR 25,000/year for the use of the label, with a reduction of 25 percent for SMEs) and has therefore not been widely used thus far. However, the Eco-label can be a good marketing tool and given the growing demand for green products in Europe it is likely that the Eco-label will become more and more a reference for green consumers.

4.2.4. Value Added Tax

The customs authorities both collect customs duties and are administrators of value added tax (VAT) for imports. The import VAT is based on the total customs value of the goods plus customs duty plus excise duty (if applicable). As of January 1, 2004 a flat 19% VAT is applied.

4.2.5. Import Tariffs

The import tariffs are based on the total value of customs goods plus customs duty plus excise duty (if applicable). All import charges are due within 10 days from notification by the customs authority. The Customs Act distinguishes three types of customs duties, which in turn influence the tariff rate used: general (autonomous), agreed (WTO members and bilateral commercial agreements - includes U.S.), and preferential (General System of Preferences or international agreements on customs union or free trade zone). The declaration of the origin of goods is the criterion used in determining these customs duties. For specific custom tariffs and further information please visit: <http://www.colnasprava.sk/cssr/www/CShome.nsf>. For sample calculation of Import custom tariffs please visit: http://tqsinet.colnasprava.sk/isstinet/KM/Calculation_M.aspx

4.3. Distribution /Business Practices

Foreign suppliers of telecommunication equipment should have a local representative and/or distributor, although this is not a legal requirement. [The U.S. Commercial Service at the U.S. Embassy](#) in Bratislava provides their flagship Gold Key Service that helps U.S exporters select potential local representatives or distributors.

4.4. Financing

Slovak companies finance the purchases of telecommunication equipment through bank loans or from company's own sources. Generally, financing details are set individually on each contract.

5. MARKET RESEARCH

The U.S. Department of Commerce's Commercial Service provides several targeted services to meet the different needs of U.S. companies seeking potential partners and business in Slovakia. To obtain more information about the U.S. Commercial Service, please visit www.export.gov or contact your local U.S. Export Assistance Center or the U.S. Commercial Service in Bratislava, P.O. Box 309, 814 99 Bratislava, Slovakia, tel.: +421 2 5920 5311, fax: +421 2 5920 5333, email: bratislava.office.box@mail.doc.gov or visit our website at: www.buyusa.gov/slovakia

